

DETAILED ACTION

Examiner's Note

1. The amendments filed 9/25/2011 have been considered and are entered. In light of the new grounds of rejection as set forth below, the following action is made non-final.

Response to Amendment

2. Applicant's arguments, see pages 2-5 filed 9/25/2011, with respect to the rejection of **claims 1 and 5-8** as set forth in paragraph 7 of the action mailed 5/26/2011, have been fully considered and are persuasive. The rejection of claims 1 and 5-8 has been withdrawn.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. **Claims 1 and 5-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugino et al. (JP 2003-313330) in view of Kotani et al. (US 5380572) and in further view of Watanabe et al. (US 5795650).

Regarding claims 1 and 5-8, Sugino teaches a polyolefin-based resin laminated film (title) comprising a coating film layer and a polyolefin-based resin substrate film (surface substrate

Art Unit: 1788

film) (para 0012) suitable for industrial adhesive films and having excellent properties such as durability curve following properties, weatherability, etc. (para 0001), which said substrate film is formed via inflation forming method (para 0028, lines 1-4), has a thickness of 40 to 200 μm (para 0029), and has a tensile modulus of 300 to 900 MPa (para 0019, lines 1-4).

Sugino also teaches that the substrate film is made of polyethylene resins (para 0013) such as low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE) and high density polyethylene (HDPE) and mixtures thereof (para 0014), and contains a UV absorber (para 0020) such as 2,2'-dihydroxy-4-methoxybenzophenone (para 0021), which is identical to the ultraviolet absorbers presently disclosed, in an amount of 0.05 to 5 parts by weight per 100 parts by weight of the polyolefin resin (para 0023).

Sugino is silent to an HDPE having a density of 0.950 to 0.959 g/cm^3 and an LLDPE having a density of 0.923 to 0.933 g/cm^3 , which is present in an amount of 50 to 90 parts by mass relative to 100 parts by mass of the mixture HDPE/LDPE mixture, a PSA layer having a thickness of 1 to 300 μm and formed from an acrylic resin-based PSA obtained by crosslinking an acrylic polymer having an Mw of 500,000 to 1,100,000 with a polyisocyanate compound, and to the presently claimed spectral transmittance.

However, Kotani teaches pressure sensitive adhesive label sheet (title) comprising a label film comprising a polyethylene resin of a density of 0.940 to 0.948 g/cm^3 towards desired stiffness and surface gloss (column 2, lines 63-66 to column 3, lines 1-2) and a secant modulus of 2500 to 5000 kg/m^2 (245 to 490 MPa) (column 4, lines 1-8), and a PSA laminated thereon

Art Unit: 1788

(column 2, lines 10-25), wherein the label film is formed of a blend of LDPE and/or LLDPE with HDPE (column 3, lines 20-24).

Given that Sugino and Kotani teach a polyethylene resin substrate film identical to that presently claimed, to include HDPE and LLDPE resin mixture a UV absorber in identical amounts, it is reasonable that substrate film disclosed by the combined references would provide the presently claimed spectral transmittance.

Note that the present claims recite a PE mixture having a density (D) = (weight parts of HDPE) (density of HDPE) + (weight parts of LLDPE) (density of LLDPE), which provides, for example, $D = 0.50(0.928 \text{ g/cm}^3) + 0.50 (0.954 \text{ g/cm}^3) = 0.464 \text{ g/cm}^3 + 0.477 \text{ g/cm}^3 = 0.941 \text{ g/cm}^3$, which is identical to that taught by the Kotani reference noted above.

Therefore, one of ordinary skill would have been well apprised and motivated to select and HDPE/LLDPE blend having the presently claimed densities in the presently claimed proportions to provide a polyolefin-based resin laminated film, which is suitable for industrial adhesive films, having a polyethylene density of the weight average of the constituent ethylene polymer resins as in the present invention.

Sugino and Kotani are silent to a PSA layer having a thickness of 1 to 300 μm and formed from an acrylic resin-based PSA obtained by crosslinking an acrylic polymer having an Mw of 500,000 to 1,100,000 with a polyisocyanate compound.

Art Unit: 1788

However, Sugino does teach adhesive tapes formed from the polyolefin-based resin laminates and an adhesive agent layer (para 0061), made of acryl-type adhesive agents, which can be of any form such as solvent, emulsion, hot-melt, etc., and tackifiers, softeners, etc. (para 0062), and it is noted that the PSAs of Kotani are contemplated to be acrylic PSAs (column 5, lines 46-50).

In addition, Watanabe teaches a teaches a pressure sensitive adhesive sheet comprising a PSA layer having a thickness of 5 to 150 μ m (column 6, lines 15-23) and PSA having a polymer with a weight-average molecular weight of from 800,000 to 1,800,000, which significantly overlaps that presently claimed, to maintain a firm bonding between the PSA and a base layer (column 4, lines 28-37).

As set forth in MPEP 2144.05, in the case where the claimed range “overlap or lie inside ranges disclosed by the prior art”, a *prima facie* case of obviousness exists, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Watanabe also teaches that said polymer is an acrylic (column 3, lines 42-44) containing carboxylic acid group-containing monomers (column 3, lines 60-62), and said PSA further comprising isocyanate crosslinking agents (column 4, lines 19-22) such as diisocyanate (polyfunctional) (column 8, lines 13-14).

The recitation in the claims that the claimed invention is “for a motor vehicle brake disc antirust film for adhering onto a motor vehicle wheel” is merely an intended use. Applicants

Art Unit: 1788

attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use.

Given that the prior art discloses a PSA layer formed on a substrate as presently claimed, it is clear that the disclosed invention of prior art combination would be capable of performing the intended use, i.e. for adhering onto a motor vehicle wheel, presently claimed as required in the above cited portion of the MPEP.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Sugino, Kotani and Watanabe references to provide a polyolefin-based resin laminated film having a PSA layer formed thereon, said PSA composed of polyisocyanate-crosslinked acrylic polymers and having a weight average molecular weight identical to that presently claimed, towards PSA tape formed of an adhesive layer having a required viscosity and thickness and a backing having a required stiffness and surface gloss based on the intended application as in the present invention.

Art Unit: 1788

5. Applicant's arguments, see pages 2-5 filed 9/25/2011, with respect to the rejection of **claims 1 and 5-8** as set forth in paragraph 7 of the action mailed 5/26/2011, have been considered but are moot in view of the new ground(s) of rejection.

The Applicants argue against Sugino as the reference discloses a polyolefin-based resin laminated film formed of a polyolefin-based resin substrate film and a urethane resin laminated thereon, whereas the substrate film of the present invention is one layer.

The Examiner respectfully disagrees and notes that 1) there is nothing recited in the current claims that requires the surface substrate film to consist of only a single layer, and 2), the open language of the “comprising” recitation in current claim 1 allows for the inclusion of additional elements not specifically recited in the claim.

The Applicants' attention is respectfully directed to the prior art rejection set forth above wherein it is noted that the combination of the prior art references teaches all the limitations of the current claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK D. DUCHENEAUX whose telephone number is (571)270-7053. The examiner can normally be reached on M-Th, 7:30 A.M. - 5:00 P.M..

Art Unit: 1788

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alicia A. Chevalier can be reached on (571)272-1490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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